VERIFICATION OF TRANSLATION

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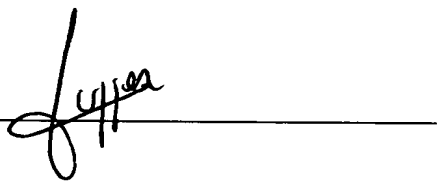
am the translator of the amendments as annexed to the IPER and I state that the following is a true translation to the best of my knowledge and belief.

Signature of translator : 

Dated : Marin, December 8, 2004

Case 2122 amended claims attached to the IPER – EP0306375

CLAIMS

1. Method of manufacturing an electro-optical cell, in particular a liquid crystal cell (2), or an electrochemical photovoltaic cell including:

- at least a first transparent front substrate (4) whose top surface forms the front face of the cell (2);

- at least a second back substrate (6) which may or may not be transparent and whose bottom surface forms the back face of said cell (2);

- the substrates (4, 6) being joined by a sealing frame which defines a volume (8) for retaining sensitive material whose physical properties, particularly optical, or electrical properties are capable of changing,

- the substrates (4, 6) including on their faces that are opposite each other at least one electrode (14, 16), said electrodes (14, 16) being intended to be connected to an electrical power or control circuit; and

- the electrodes (14, 16) of the cell (2) extending substantially as far as the edges of the cell to form connection means (18) in order to set up the electrical connection between said cell (2) and the power or control circuit,

said method being characterised in that it includes the steps of:

- structuring the corresponding electrodes (14, 16) on each of the substrates (4, 6);

- depositing a contact bump (20) made of an electrically conductive material on each electrode (14, 16), in the region where the electrodes will be flush with the edges of the cell,

- structuring at least one wall (12) on one of the substrates (4, 6) , which defines, via its inner lateral face, the volume (8) for retaining the sensitive material, said wall (12) extending in a set back position with respect to the edges of the cell, so as to free the connection contacts (18), and thus with the electrodes (14, 16) passing through it;

- joining the second substrate (4) to the first substrate (6);

- introducing a sealing material capable of flowing into the gap (28) defined by said substrates (4, 6) and the external lateral face of the wall (12) until at least a part of said gap is occupied by the sealing material; and

- solidifying the sealing material so that the latter forms the sealing frame of the cell (2) thereby obtained.

2. Method according to claim 1, characterised in that it further includes the step of cutting the cell (2) such that it has a substantially flat edge with lateral contact zones having a large active surface.

3. Method according to any of claims 1 or 2, characterized in that the sealing material penetrates the gap (28) by capillary action.

4. Method of manufacturing at least one electro-optical cell, in particular a liquid crystal cell (2), or an electrochemical photovoltaic cell including:

- at least a first transparent front substrate (4) whose top surface forms the front face of the cell (2);

- at least a second back substrate (6) which may or may not be transparent and whose bottom surface forms the back face of said cell (2);

- the substrates (4, 6) being joined by a sealing frame which defines a volume (8) for retaining sensitive material whose physical properties, particularly optical, or electrical properties are capable of changing,

- the substrates (4, 6) including on their faces that are opposite each other at least one electrode (14, 16), said electrodes (14, 16) being intended to be connected to an electrical power or control circuit; and

- the electrodes (14, 16) of the cell (2) extending substantially as far as the edges of the cell to form connection means (18) in order to set up the electrical connection between said cell (2) and the power or control circuit,

said method being characterised in that it includes the steps consisting in:

- structuring the corresponding electrodes (14, 16) on each of the substrates (4, 6);

- depositing a contact bump (20) made of an electrically conductive material on each electrode (14, 16), in the region where the electrodes will be flush with the edges of the cell,

- structuring, on one of the substrates (4, 6) , at least one filling channel (22) defined by two walls (10, 12) which extend at a distance from each other and between which the contact studs (20) are arranged;

- joining the second substrate (6) to the first substrate (4);

- introducing a sealing material capable of flowing into the filling channel (22) until the entire volume of said filling channel (22) is occupied by the sealing material;

- solidifying the sealing material so that the latter forms the sealing frame, and

- cutting the cell (2) so that the latter has a substantially flat edge with lateral contact zones having a large active surface.

5. Method according to claim 4, characterised in that a batch of cells (2) is made including two plates (36, 38) common to all of the cells and a network of walls (10, 12) defining, for each cell, a volume (8) for retaining the sensitive material as well as filling channels (22), which are for filling with a sealing material in order to connect the two plates (36, 38) and form the sealing frames for said cells.

6. Method according to claim 5, characterised in that a first plurality of holes (26) for filling the volumes (8) with the sensitive material and a second plurality of holes (24) for supplying the sealing material are made in one of the plates (36) or (38).

7. Method according to any of claims 4 to 6, characterised in that the sealing material penetrates the gap (28) or the filling channel (22) by capillary action.

8. Method according to claim 7 in that it depends upon any of claims 10 to 12, characterised in that it includes the steps of:

- creating a vacuum in the filling channel (22);
- making the sealing material penetrate said filling channel (22), and
- re-establishing the pressure outside the cell (2) such that, via the effect of the pressure difference between the filling channel (22) in which the vacuum prevails and the environmental pressure, the sealing material is driven to the bottom of the filling channel.

9. Method according to any of claims 1 to 8, characterised in that a layer of photoresist material is deposited on one of the substrates (6), said layer will then be structured by photo-etching techniques to give it the shape of one or several walls (10, 12).

10. Method according to claim 9, characterised in that the photoresist layer is structured so as to form, not only the wall or walls (10, 12), but also distance structures for maintaining a constant distance between the two substrates (4, 6) of the cell (2).

11. Method according to any of claims 1 to 10, characterised in that the sealing material is chosen from the group formed by resins that can be polymerised by sensitisation using a light or by heating by raising the temperature of the ambient medium, by thermoplastic resins, by cyanoacrylate adhesives and by dual component adhesives whose components harden over time or via the effect of a temperature increase when they are placed in the presence of each other.

12. Method according to any of claims 1 to 11, characterised in that the contact bumps (20) are formed by galvanic growth.

13. Method according to claim 12, characterised in that the contact bumps (20) are made of gold.

14. Method according to any of claims 1 to 11, characterised in that the contact bumps are made by selective printing.

15. Method according to claim 14, characterised in that a resin charged with conductive particles is used.

16. Method according to claim 15, characterised in that the resin is an epoxy adhesive.